

# Planar Antenna Arrangement

## Abstract

An antenna arrangement for use over a metallic surface in motor vehicles is adapted to improve reception in the AM frequency range. An FM loop includes two conductor sections separated by a capacitor. An AM probe extends from one of the conductor sections near an antenna feed line connector and isolates AM signals by an L-C circuit between the probe and the connection to the conductor section. Omnidirectional reception is achieved by a coplanar WB probe, FM probe and AM coiled loop between them, mounted to a substrate.